# PWQ-2000Water Quality Monitoring System
# （electrode method）

## Introduction



PWQ-2000 water quality monitoring system is a system that integrates pipe network water quality monitoring sensors, data processing units, and internal water flow pipeline units. It can continuously measure temperature, PH, turbidity, disinfectant indicators, and can extend water quality parameters such as conductivity and ORP. The disinfectant index adopts the constant voltage method, and the two disinfectant i ndexes of residual chlorine and chlorine dioxide are optional; the electrode structure is simple, easy to clean and replace, no need to replace the diaphragm and reagent, and simple maintenance.

The turbidity adopts the 90 ° scattered light technology of EPA principle, adopts LED light source, low power consumption and long life of light source.

## Features

- Integrated design, save space.
- The internal wiring and waterway are highly integrated, and users only need to connect the power supply and enter and exit the water.
- The internal waterway design can try to ensure that the water flow is stable during the internal measurement process of the equipment, and ensure the monitoring data is accurate.
- With 7-inch color touch screen, the operation interface is simple, easy operation, reliable system, low maintenance.
- With data storage and curve display functions, master the dynamic changes of water quality.
- With automatic fault diagnosis function, abnormal information recording and uploading functions, such as parts failure, over-range alarm, over-standard alarm and other information.
- With three-level management authority.
- Historical data download and curve display can intuitively and accurately understand and track the changes of water parameters within a certain period.
- Optional wireless data transmission module.

## Applications

- Rural tap water quality monitoring.
- Water quality monitoring of waterworks and water supply network.
- Detection of water quality standards for secondary water supply in the community.
- Real-time water quality monitoring of swimming pool, SPA.

## Technical Specifications

| | |
|---|---|
| **Display** | 7inch LED touch screen, can operate in direct sunlight |
| **Power** | AC Power：85-500VAC；DC Power：9-36VDC |
| **Output** | 8 way 4-20mA analog output. Program setting response parameters and response values |
| **Relay** | Four relays, program setting response parameters and response values |
| **Communication Protocol** | Standard MODBUS RS485 communication function, real-time transmission of measured values. Optional wireless communication method: 4G: UDP / TCP NB: UDP |
| **Storage & Operation Temp.** | Storage temperature:0-60℃,Operation temperature:0-45℃ (non-frozen) |
| **Protection Level** | IP54 |
| **Size** | 340*450*900mm (L* W * H) |



Probest Intelligent Technology Co.,Ltd.
Email: international-sales@probest.cn
Tel:+86-(0)591-83226312
Web:www.probesti.com

## Monitoring parameter index

| | | |
|---|---|---|
| Residual chlorine / total chlorine | Principle | Constant voltage method |
| | Range | 0-20ppm |
| | Resolution | 0.01ppm |
| pH | Principle | Glass electrode method |
| | Range | 0-14 pH |
| | Resolution | 0.01 pH |
| | Accuracy | ±0.1 pH |
| ORP | Principle | Glass electrode method |
| | Range | -2000mV-2000mV |
| | Resolution | 1mV |
| | Accuracy | ±5mV |
| Conductivity | Principle | Conductivity cell method |
| | Range | 10us/cm-5000 us/cm（K=1） |
| | Resolution | 0.1uS/cm~0.01mS/cm（Depends on range） |
| | Accuracy | ±3% or 3 us/cm，greater one |
| Turbidity | Principle | Light scattering |
| | Range | 0-100NTU |
| | Resolution | 0.001-0.1NTU（Depends on range） |
| | Accuracy | 0.001-40NTU: reading ±2% or ±0.015NTU，greater one；<br>40-100NTU: reading ±5% |
| Color | Principle | Absorbance spectrophotometry |
| | Range | 0-100 degree |
| | Resolution | 0.1 degree |
| | Accuracy | ±10% or±1degree, whichever is greater |
| Temp. | Principle | Thermistor method |
| | Range | 0℃-40℃ |
| | Resolution | 0.1℃ |
| | Accuracy | ±0.5℃ |



Probest Intelligent Technology Co.,Ltd.
Email: international-sales@probest.cn
Tel:+86-(0)591-83226312
Web:www.probesti.com